

# *Ash Meadows National Wildlife Refuge Big Spring Fire*

## Burned Area Emergency Stabilization & Rehabilitation Plan

U.S. Fish and Wildlife Service  
Desert National Wildlife Refuge Complex

Prepared by:  
Burned Area Emergency Response Team

March 31, 2003

**Ash Meadows NWR Big Spring Fire**

# **BURNED AREA EMERGENCY STABILIZATION & REHABILITATION (ESR) PLAN**

**AGENCY/UNIT:** U.S. Fish and Wildlife Service  
Desert National Wildlife Refuge Complex  
Ash Meadows NWR

**LOCATION:** Amargosa Valley, Nye County, Nevada

**DATE:** March 31, 2003

**PREPARED BY:** United States Department of the Interior  
Desert National Wildlife Refuge Complex  
Ash Meadows NWR

**Submitted By:** \_\_\_\_\_  
Richard M. Birger, Project Leader  
Desert National Wildlife Refuge Complex

Date:

**DEPARTMENT OF THE INTERIOR  
BURNED AREA EMERGENCY STABILIZATION & REHABILITATION PLAN  
ACCOMPLISHMENT REPORT**

**EXECUTIVE SUMMARY**

**Introduction**

This plan has been prepared in accordance with the U.S. Department of the Interior, *Burned Area Emergency Stabilization General Policy and Procedures* (620 DM 3) January, 2001 and U.S. Fish and Wildlife Service Burned Area, Interim Burned Area Emergency Stabilization and Rehabilitation Guidelines (2002). This plan provides for Emergency Stabilization and Rehabilitation (ESR) for the Big Spring fire that occurred within the Ash Meadows National Wildlife Refuge (NWR) between August 6<sup>th</sup> and 10<sup>th</sup>, 2002. The fire consumed approximately 90 acres of brush and woodland vegetation on Service, BLM and private property. The primary objectives of this Burned Area Emergency Stabilization and Rehabilitation (ESR) Plan are:

- \*□ To prescribe post-fire mitigation measures necessary to protect critical natural, cultural and human resources.
- \*□ To mitigate unacceptable effects of the fire such as erosion and the spread of exotic vegetation.

This plan addresses burned area stabilization and rehabilitation tasks to mitigate the effects of the fire. A Burned Area Emergency Response (BAER) Team was comprised of key FWS staff from the Ash Meadows NWR and the Ecological Services Las Vegas Field Office. The BAER Team conducted an on the ground analysis of the fire effects and proposed mitigation measures. An assessment of the fire effects on threatened and endangered species was also conducted by the team. Ash Meadows NWR's Biological Technician served as the vegetation specialist in evaluating the effects of the fire on existing listed plants and noxious weeds within the burned area. Of primary concern were fire effects on two plants: spring-loving centuary and Ash Meadows gumplant, both federally listed as threatened. The presence of cultural resources within the burned area is likely, and will need to be surveyed and documented prior to the implementation of on-the-ground fire restoration tasks. The fire area was mapped with a Garmin GPS unit.

**Management Requirements**

Ash Meadows National Wildlife Refuge was Congressionally established in 1984. Lands within the refuge were purchased under Endangered Species Act (16 U.S.C., Section 715d). The Executive and Congressionally established purposes for Ash Meadows NWR are:

... to conserve (A) fish or wildlife which are listed as endangered or threatened...or (B) plants. (16 U.S.C. 1534 - Endangered Species Act of 1973)

Refuge management is further directed by the National Wildlife Refuge System Administration Act as Amended by the National Wildlife Refuge Improvement Act of 1997 and existing/approved land management plans including:

Ash Meadows NWR Refuge Management Plans (1989)  
Recovery Plan for the Endangered and Threatened Species of Ash Meadows, Nevada (1990)  
Ash Meadows NWR Fire Management Plan (1990)  
Annual Integrated Pest Management Plans

**Burned Area Emergency Response**

The BAER Team evaluated fire suppression impacts to the area as well as rehabilitation and ESR needs. This plan is developed to address the following:

- \*□ Rehabilitation requirements established by Federal law, policies, and relevant approved resource management plans.
- \*□ Implement treatments to prevent the spread of noxious weeds as a result of the fire.
- \*□ Monitor the recovery of existing and planted native vegetation.
- \*□ Determine and document the effectiveness completed tasks.

**Resource Damages and Threats to Resources and Human Safety**

The BAER Team conducted a field survey after the fire to identify impacts and compiled the following recommendations for rehabilitation of affected lands:

**Emergency Stabilization and Rehabilitation**

- \* □ Chemically Treat up to 80 acres within and surrounding the burned area to prevent expansion of pre-fire seed sources of noxious weeds, including saltcedar and fivehook basia.
- \* □ Re-plant mesquite trees and other native vegetation destroyed by the fire to reduce erosion, accelerate habitat recovery, and reduce the spread of invasive plants.
- \* □ Remove burned trees, limbs, and other excess debris accumulated within the Big Spring flow channel as a result of the fire.
- \* □ Remove debris and re-contour landscapes altered as a result of fire suppression activities.
- \* □ Monitor revegetation work, and noxious weed treatments in burned area during the first growing season.
- \* □ Extend the work assignment of the Temporary Biological Technician and Gardener for implementation, tracking, monitoring and reporting of tasks identified in this plan.

**DEPARTMENT OF THE INTERIOR  
BURNED AREA EMERGENCY STABILIZATION & REHABILITATION PLAN  
ACCOMPLISHMENT REPORT**

**PART A FIRE LOCATION AND BACKGROUND INFORMATION**

<b>Fire Name</b>	Big Spring Fire	<b>Dates Contained</b>	August 7, 2002
<b>Fire Number</b>	14550-9261-1604	<b>Dates Controlled</b>	August 10, 2002
<b>Agency Unit</b>	Desert National Wildlife Refuge Complex		
<b>Region</b>	R1, California/Nevada Operations	<b>Total Acres Burned</b>	90 acres
<b>State(s)</b>	Nevada		
<b>County(s)</b>	Nye	<b>Acres / Jurisdiction</b>	
<b>Ignition Date/Manner</b>	Investigation inconclusive (probable spark from a grinder being used on private land)	<b>FWS</b>	70 acres
		<b>BLM</b>	10 acres
<b>Zone</b>		<b>Private</b>	10 acres

**PART B NATURE OF PLAN**

I. Type of Plan (check one box below):

<input type="checkbox"/>	<b>Suppression Rehabilitation (complete Parts A, B, C, and H only)</b>
<input type="checkbox"/>	<b>Emergency Stabilization &amp; Rehabilitation (complete all parts)</b>
<input type="checkbox"/>	<b>Both Suppression &amp; ESR (completed all parts)</b>

II. Type of Action (check one box below):

<input type="checkbox"/>	<b>Initial submission</b>
<input type="checkbox"/>	<b>Updating or revising the initial submission</b>
<input type="checkbox"/>	<b>Supplying information for accomplishment to date on work underway</b>
<input type="checkbox"/>	<b>Final report (to comply with the closure of the EFR account)</b>

**DEPARTMENT OF THE INTERIOR  
BURNED AREA EMERGENCY STABILIZATION & REHABILITATION PLAN  
ACCOMPLISHMENT REPORT**

**PART C REHABILITATION ASSESSMENT**

---

**I. Rehabilitation Objectives:**

- \* ☐ Recommend post-fire rehabilitation prescriptions which prevent irreversible loss of natural and cultural resources.
- \* ☐ As practical and necessary, restore natural conditions to areas disturbed by fire suppression actions.
- \* ☐ Conduct immediate post-burn reconnaissance for fire suppression related impacts to T&E species.
- \* ☐ Provide long-term monitoring recommendations intended to ensure the success of rehabilitation efforts.

**II. Rehabilitation Recommendations:**

See Summary of Rehabilitation Recommendations.

**III. BAER Team Members**

SPECIALTY/PROFESSION	NAME/AGENCY	ASSESSMENT INCLUDED (Yes or No)
Team Leader	Eric Hopson (FWS)	no
Operations	Eric Hopson & Lee Nelson (FWS)	no
Hydrologist	N/A	N/A
Soil Scientist	N/A	N/A
Forester	N/A	N/A
Cultural Resource/Archeologist	Anan Raymond, contacted (FWS)	no
Vegetation Specialist	Deborah Johnson (FWS)	no
Fish & Wildlife Biologist	Shawn Goodchild (FWS)	no
Fish & Wildlife Biologist	Dan Reinkensmeyer (FWS)	no

**IV. Resource Advisors:** (Note: Resource Advisors are individuals who assisted the BAER Team with the preparation of this plan. See Part H of this plan for a full list of agencies and individuals who were consulted or otherwise contributed to the development of this plan.

NAME	AFFILIATION, SPECIALTY, or PROFESSION
Richard M. Birger	Desert NWRC, Project Leader
Linda Miller	Desert NWRC, Deputy Project Leader
Eric Hopson	(Former) Ash Meadows NWR, Refuge Manager
Deborah Johnson	(Former) Ash Meadows Biological Science Tech. - Fire Rehabilitation Project
Lee Nelson	Desert NWRC Fire Management Officer
Shawn Goodchild	Fish & Wildlife Biologist, Ecological Services Las Vegas Field Office
Dan Reinkensmeyer	Fish & Wildlife Biologist, Ecological Services Las Vegas Field Office

**DEPARTMENT OF THE INTERIOR  
BURNED AREA EMERGENCY STABILIZATION & REHABILITATION PLAN  
AND ACCOMPLISHMENT REPORT**

**PART D SUMMARY OF APPROVAL AUTHORITIES (By Activities/Cost)**

**ACTIVITIES REQUIRING REGIONAL OFFICE REVIEW/APPROVAL:**

Long-term ESR request (charged to ESR)

Chemically Treat Noxious Weeds in and around the burned area	\$10,400
Plant trees and other native vegetation within the burned area	\$9,850
Archeological Review/Clearance of burned area	\$1,500
Monitor and evaluate revegetation and chemical treatments of Noxious Weeds in the burned	\$1,400
<b>SUBTOTAL</b>	<b>\$23,150</b>

**Activities Requiring Project Leader's Approval:**

FWS Base Funding

N/A	
<b>SUBTOTAL</b>	

<b>TOTAL REHABILITATION COST (short &amp; long-term)</b>	<b>\$23,150</b>
--	-----------------



**DEPARTMENT OF THE INTERIOR  
BURNED AREA EMERGENCY STABILIZATION & REHABILITATION PLAN  
AND ACCOMPLISHMENT REPORT**

**PART E      SUMMARY OF ACTIVITIES**

The SUMMARY OF ACTIVITIES table identifies **trackable** costs proposed for Emergency Stabilization and Rehabilitation (ESR) funding, agency operation funds, and other funding sources. Only trackable expenditures are displayed in the total cost column. They are coded with the appropriate cost authority. The total cost of the rehabilitation effort to date, excluding the costs absorbed by the fire (fire crew, labor and associated overhead) is displayed as either Emergency Stabilization & Rehabilitation (**ESR**), Agency Operations (**OP**) or Other (**O**).

TREATMENT SPECIFICATION	UNIT	UNIT COST	# OF UNITS	COST BY FUND SOURCE			IMPLEM ENTATIO METHOD	SPECIF ICATIO N TOTAL
				FIRE	ES	R		
N-1 Chemically Treat Noxious Weeds	Acres	\$ 130	80	\$ 10,400			P	\$10,400
N-2 Replant native vegetation	Acres	\$ 123	80	\$ 9,850			P	\$ 9,850
N-3 Archeological Survey - Burn Area	Acres	\$ 19	80	\$ 1,500			P	\$ 1,500
N-4 Monitor and evaluate Revegetation and Chemical Treatment of Noxious Weeds	Surveys	\$ 25	Five	\$ 1,400			P	\$ 1,400
<b>TOTAL</b>	Acres	\$297	80	\$ 23,150			P	\$23,150
<b>COST:</b> ES = Emergency Stabilization.; R = Long-term Rehabilitation <b>METHOD:</b> P = Agency Personnel								

**DEPARTMENT OF THE INTERIOR  
BURNED AREA EMERGENCY STABILIZATION & REHABILITATION PLAN  
AND ACCOMPLISHMENT REPORT**

**PART F - SPECIFICATIONS**

<b>SPECIFICATION TITLE:</b>	<b>Chemically Treat Noxious Weeds</b>	<b>AGENCY:</b>	FWS
<b>PART E LINE ITEM:</b>	N-1 Noxious Weeds	<b>FISCAL YEAR(S) (list each year):</b>	2003

**I. WORK TO BE DONE** (describe or attach exact specifications of work to be done):

<b>Number and Describe Each Task:</b>
<p><b>A. General Description:</b> Chemically treat up to 80 acres of burned habitat prone to advanced spread of salt cedar, fivehook basia and other noxious weeds as the result of loss of native vegetative cover and nutrient release via fire ash.</p> <p><b>B. Location:</b> Big Spring burned area, Ash Meadows NWR</p> <p><b>C. Design/Construction Specifications:</b></p> <ol style="list-style-type: none"> <li>1. Gardener and Biological Technician will carry out all herbicide related work.</li> <li>2. Both the Biological Science Technician and the Gardener are Certified Pesticide Applicators. The Bio. Science Tech. will lead/supervise all herbicide treatments.</li> <li>3. Chemical application methods will be approved in the refuge's annual Integrated Pest Management Program and section 7 consultation.</li> </ol> <p><b>D. Purpose of Treatment Specification:</b> Prevent increased spread and infestations of salt cedar, fivehook basia, and other noxious weeds as a result of the fire.</p>

**II. LABOR, MATERIALS AND OTHER COST:**

<b>PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item): Do not include contract personnel costs here (see contractor services below).</b>	<b>COST/ITEM</b>
GS-5 @ \$12/ hr x 320 hrs x 1 fiscal year	\$3,840
WG-4 Gardener/certified pesticide applicator @ \$15.50 / hr x 320 hrs x 1 fiscal year	\$4,960
WG-8 Maintenance Worker @ \$20 / hr x 80 hrs x 1 fiscal year	\$1,600
<b>TOTAL PERSONNEL SERVICE COST</b>	<b>\$10,400</b>
<b>EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item): Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.</b>	<b>COST/ITEM</b>
None	
<b>TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST</b>	
<b>MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):</b>	<b>COST/ITEM</b>
Enough material & supplies currently on hand at refuge	
<b>TOTAL MATERIALS AND SUPPLY COST</b>	
<b>TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):</b>	<b>COST/ITEM</b>
None	
<b>TOTAL TRAVEL COST</b>	

CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):	COST/ITEM
None	
TOTAL CONTRACT COST	

#### SPECIFICATION COST SUMMARY

FISCAL YEAR	UNIT	UNITS COST	# OF UNITS	COST	FUNDING SOURCE	METHOD
FY 1	Acres	\$130.00	80.0	\$10,400	9262	P
FY 2			None			
<b>TOTAL</b>	<b>ACRES</b>	<b>\$130.00</b>	<b>80.0</b>	<b>\$10,400</b>	<b>ESR</b>	<b>P</b>

#### FUNDING SOURCES:

**F** = Fire Suppression Account  
**EFR** = Emergency Fire Rehabilitation  
**OP** = Agency Operating Fund  
**O** = Other

#### METHODS:

**P** = Agency Personnel Services  
**C** = Contract (long-term)  
**EFC** = Emergency Fire Contract  
**FC** = Crew Labor Assigned to Fire

#### SOURCE OF COST ESTIMATE

1. Estimate obtained from 2-3 independent contractual sources.
2. Documented cost figures from similar project work obtained from local agency sources.
3. Estimate supported by cost guides from independent sources or other federal agencies
4. Estimates based upon government wage rates and material cost.
5. No cost estimate required - cost charged to Fire Suppression Account

P

P = Personnel Services, M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

#### III. RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS REPORT:

List Relevant Documentation and Cross-Reference Location within BAER Report:

**DEPARTMENT OF THE INTERIOR  
BURNED AREA EMERGENCY STABILIZATION & REHABILITATION PLAN  
AND ACCOMPLISHMENT REPORT**

**PART F - SPECIFICATIONS**

<b>SPECIFICATION TITLE:</b>	<b>Stream channel clearing and native vegetation restoration.</b>	<b>AGENCY:</b>	FWS
<b>PART E LINE ITEM:</b>	N-2 Revegetation	<b>FISCAL YEAR(S) (list each year):</b>	2003

**I. WORK TO BE DONE** (describe or attach exact specifications of work to be done):

**Number and Describe Each Task:**

**A. General Description:** Plant up to 500 nursery raised mesquite trees (delivered in one gallon pots) in the burned area. Collect seed of native grasses and shrubs and plant this seed across up to 40 acres of the burn. Install solar-powered water pumps and dripline systems (as needed) to adequately water revegetated areas.

**B. Location Sites:** Big Spring burned area, Ash Meadows NWR

**C. Design/Construction Specifications:**

1. The Gardener and Biological Technician will be primary persons planting, collecting seed and installing the pumps/dripline. Volunteer assistance may be used to further this task if available.
2. Clear dead and downed trees, limbs and other burned material buildup in the Big Stream channel as a result of the fire.
3. Plant nursery grown trees in the burned area; these trees are grown from seed collected within Ash Meadows NWR. Seed from other native grasses, forbes and brush species will be collected (from areas adjacent to the burn) will also be planted in the burn area.

**D. Purpose of Treatment Specification:** Prevent or reduce erosion as well as future infestations of noxious weeds.

**II. LABOR, MATERIALS AND OTHER COST:**

<b>PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item): Do not include contract personnel costs here (see contractor services below).</b>		<b>COST/ITEM</b>
GS-5 Biological Technician @ \$12 / hr X 320 hrs x 12 fiscal year		\$3,840
WG-4 Gardener @ \$16 / hr x 320 hrs x 1 fiscal year		\$4,960
<b>TOTAL PERSONNEL SERVICE COST</b>		<b>\$8,800</b>
<b>EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item): Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.</b>		<b>COST/ITEM</b>
5,000 feet of ½ inch dripline @ 5 cents/ft		\$250
Solar powered water pumping systems, 2 @ \$150 each		\$300
<b>TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST</b>		<b>\$550</b>
<b>MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):</b>		<b>COST/ITEM</b>
Miscellaneous supplies such as fuel, hand tools, and parts for (existing equipment) repairs, etc		\$500
<b>TOTAL MATERIALS AND SUPPLY COST</b>		<b>\$500</b>
<b>TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):</b>		<b>COST/ITEM</b>
None		
<b>TOTAL TRAVEL COST</b>		
<b>CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):</b>		<b>COST/ITEM</b>
None		
<b>TOTAL CONTRACT COST</b>		

### SPECIFICATION COST SUMMARY

FISCAL YEAR	UNIT	UNITS COST	# OF UNITS	COST	FUNDING SOURCE	METHOD
FY 1	Acres	\$123.13	80.0	\$9,850	ESR	P
FY2			None			
<b>TOTAL</b>	<b>ACRES</b>	<b>\$123.13</b>	<b>80.0</b>	<b>\$9,850</b>	<b>ESR</b>	<b>P</b>

#### FUNDING SOURCES:

**F** = Fire Suppression Account  
**EFR** = Emergency Fire Rehabilitation  
**OP** = Agency Operating Fund  
**O** = Other

#### METHODS:

**P** = Agency Personnel Services  
**C** = Contract (long-term)  
**EFC** = Emergency Fire Contract  
**FC** = Crew Labor Assigned to Fire

### SOURCE OF COST ESTIMATE

1. Estimate obtained from 2-3 independent contractual sources.	
2. Documented cost figures from similar project work obtained from local agency sources.	
3. Estimate supported by cost guides from independent sources or other federal agencies	
4. Estimates based upon government wage rates and material cost.	M/P
5. No cost estimate required - cost charged to Fire Suppression Account	

P = Personnel Services, M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

### III. RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS REPORT:

List Relevant Documentation and Cross-Reference Location within BAER Report:

## DEPARTMENT OF THE INTERIOR BURNED AREA EMERGENCY STABILIZATION & REHABILITATION PLAN AND ACCOMPLISHMENT REPORT

### PART F - SPECIFICATIONS

<b>SPECIFICATION TITLE:</b>	<b>MONITOR MORTALITY OF BURNED RIPARIAN RESTORATION PLANTATION</b>	<b>AGENCY:</b>	FWS
<b>PART E LINE ITEM:</b>	N-4 Monitor & evaluate revegetation and chemical treatments.	<b>FISCAL YEAR(S) (list each year):</b>	2003

#### I. WORK TO BE DONE (describe or attach exact specifications of work to be done):

##### Number and Describe Each Task:

**A. General Description:** Monitor and evaluate Revegetation plantings and Chemical Treatments of Noxious Weeds in the burned area.

**B. Location/(Suitable) Sites:** Big Spring burned area, Ash Meadows NWR

##### C. Design/Construction Specifications:

1. The Bio. Tech. will monitor and record growth and survivorship of trees and other vegetation planted. Mortality of noxious weeds treated with herbicide will also be monitored and recorded. The number of trees planted and areas of noxious weeds treatments will be recorded. Followup surveys will be conducted in the early spring of 2003 to determine percent survivorship of planted trees, and kill rate of treated noxious weeds. This information will be documented and described in the final report.

2. Areas in need of further noxious weed control measures will be mapped with a hand held GPS unit. Follow up treatments will be conducted with future refuge force account funding.

**D. Purpose of Treatment Specification:** To determine and evaluate effectiveness of treatments, and determine if additional future work is necessary.

**II. LABOR, MATERIALS AND OTHER COST:**

<b>PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item):</b>		<b>COST/ITEM</b>
Do not include contract personnel costs here (see contractor services below).		
GS-5 Biological Technician @ \$12 / hr x 120 hrs x 1 fiscal year		\$1,440
TOTAL PERSONNEL SERVICE COST		\$1,440
<b>EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item): Note: Purchases</b>		<b>COST/ITEM</b>
require written justification that demonstrates cost benefits over leasing or renting.		
None		
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST		
<b>MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):</b>		<b>COST/ITEM</b>
None		
TOTAL MATERIALS AND SUPPLY COST		
<b>TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):</b>		<b>COST/ITEM</b>
None		
TOTAL TRAVEL COST		
<b>CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):</b>		<b>COST/ITEM</b>
TOTAL CONTRACT COST		

**SPECIFICATION COST SUMMARY**

FISCAL YEAR	UNIT	UNITS COST	# OF UNITS	COST	FUNDING SOURCE	METHOD
FY 1	Surveys	\$288.00	Five	\$1,440		P
FY 2			None			
<b>TOTAL</b>		<b>\$288.00</b>	<b>5.0</b>	<b>\$1,440</b>	<b>ESR</b>	<b>P</b>

**FUNDING SOURCES:**

**F** = Fire Suppression Account  
**EFR** = Emergency Fire Rehabilitation  
**OP** = Agency Operating Fund  
**O** = Other

**METHODS:**

**P** = Agency Personnel Services  
**C** = Contract (long-term)  
**EFC** = Emergency Fire Contract  
**FC** = Crew Labor Assigned to Fire

**SOURCE OF COST ESTIMATE**

1. Estimate obtained from 2-3 independent contractual sources.	
2. Documented cost figures from similar project work obtained from local agency sources.	
3. Estimate supported by cost guides from independent sources or other federal agencies	
4. Estimates based upon government wage rates and material cost.	P
5. No cost estimate required - cost charged to Fire Suppression Account	

P = Personnel Services, M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

**III. RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS REPORT:**

List Relevant Documentation and Cross-Reference Location within BAE R Report:
---

**DEPARTMENT OF THE INTERIOR  
BURNED AREA EMERGENCY STABILIZATION & REHABILITATION PLAN  
AND ACCOMPLISHMENT REPORT**

**PART G FWS - DESERT NATIONAL WILDLIFE REFUGE COMPLEX - REVIEW AND APPROVAL**

---

**I. Suppression Related Rehabilitation Approval (check one box below):**

- \* ☐ Approved  
\* ☐ Approved with Revision  
\* ☐ Disapproved

**Explanation for revision or disapproval:**

---

Richard M. Birger, Project Leader, Desert NWRC

Date

**II. Emergency Stabilization & Rehabilitation (ESR) Approval (check one box below):**

- \* ☐ Approved  
\* ☐ Approved with Revision  
\* ☐ Disapproved

**Explanation for revision or non-concurrence:**

---

Steve Thompson, Manager, California/Nevada Operations

Date

**DEPARTMENT OF THE INTERIOR**

**BURNED AREA EMERGENCY STABILIZATION & REHABILITATION PLAN  
AND ACCOMPLISHMENT REPORT**

**APPENDIX I: ENVIRONMENTAL DOCUMENTATION CONSULTATIONS**

---

- \* ☐ National Environmental Policy Act, Compliance Documentation
- \* ☐ Categorical Exclusion Checklist
- \* ☐ National Historic Preservation Act (Section 106) Compliance



**BIG SPRING FIRE  
BURNED AREA EMERGENCY STABILIZATION AND REHABILITATION PLAN  
Environmental Compliance Considerations and Documentation**

**A. FEDERAL, STATE, AND PRIVATE LANDS ENVIRONMENTAL COMPLIANCE RESPONSIBILITIES**

All projects proposed in this Burned Area Emergency Stabilization and Rehabilitation (ESR) Plan that are prescribed, funded, or implemented by Federal agencies on Federal, State, Tribal, or private lands are subject to compliance with the *National Environmental Policy Act* (NEPA) in accordance with the guidelines provided by the *Council on Environmental Quality (CEQ) Regulations (40 CFR 1500-1508)*. This Appendix documents the considerations of NEPA compliance requirements for prescribed rehabilitation and monitoring actions described in this plan.

This plan has been developed by an interdisciplinary BAER Planning Team comprised of representatives from the: U.S. DOI Fish & Wildlife Service's Desert National Wildlife Refuge Complex and Ecological Service Southern Nevada Field Office.

**B. RELATED PLANS AND CUMULATIVE IMPACTS ANALYSIS**

The individual actions recommended by the BAER Team within the Burned Area Emergency Stabilization and Rehabilitation Plan are adequately covered by the:

Intra-agency Formal Section 7 Consultations; the Annual Integrated Pest Management Plan, the Ash Meadows NWR Refuge Management Plan (1989), the Recovery Plan for the Endangered and Threatened Species of Ash Meadows, Nevada (1990) the Ash Meadows NWR Fire Management Plan (1990), or are Categorical Exclusions from further environmental analysis as provided for in the Department of the Interior, Manual Part 516, and U.S. Fish and Wildlife Service, NEPA Guidelines, Part 516 DM 6, Appendix 1.

All applicable and relevant Department and Agency Categorical Exclusions are listed below. Department exceptions (516) DM 2.3 do not apply to any of the individual actions proposed.

**Departmental Categorical Exclusions:**

- |                           |   |
|---------------------------|---|
| 516 DM 6 App. 1.4A(3) iii | The planting of seeds or seedlings and other minor revegetation actions.  |
| 516 DM 6 App. 1.4A(5)     | Fire management activities, including prevention and restoration measures, when conducted in accordance with departmental and Service procedures. |

**U.S. Fish and Wildlife Service Categorical Exclusions:**

(1) Research, inventory, and information collection activities directly related to the conservation of fish and wildlife resources which involve negligible animal mortality or habitat destruction, no introduction of contaminants, or no introduction of organisms not indigenous to the affected ecosystem.

(3) The construction of new, or the addition of, small structures or improvements, including structures and improvements for the restoration of wetland, riparian, instream, or native habitats, which result in no or only minor changes in the use of the affected local area. The following are examples of activities that may be included.

- i. The installation of fences.
- ii. The construction of small water control structures.
- iii. The planting of seeds or seedlings and other minor revegetation actions.
- iv. The construction of small berms or dikes.
- v. The development of limited access for routine maintenance and management purposes.

(5) Fire management activities including prevention and restoration measures, when conducted in accordance with departmental and Service procedures.

**Cumulative Impact Analysis:** Cumulative effects are the environmental impacts resulting from the incremental impacts of a proposed action, when added to other past, present, and reasonably foreseeable future actions, both Federal and non federal. Cumulative impacts

can result from individually minor but collectively significant actions taking place over a period of time. The emergency protection and rehabilitation treatments for AB, Railroad, and Rio Vista Fires, as proposed in this ESR Plan, do not result in an intensity of impact (i.e. major ground disturbance, etc.) that would cumulatively constitute a significant impact on the quality of the environment. The treatments are consistent with the above jurisdictional management plans and associated environmental compliance documents.

No direct or indirect unavoidable adverse impacts to the biological or physical environment would result from the implementation of this ESR Plan. The implementation of emergency stabilization and rehabilitation treatments proposed in the plan would not result in any adverse effect on the burned area or areas downstream. Conversely, implementation of the plan would be expected to result in a cumulatively beneficial effect by reducing the extent and intensity of the fire's effect on native wildlife and plant species.

#### C. STATEMENT OF COMPLIANCE FOR THE BIG SPRING BURNED AREA EMERGENCY REHABILITATION PLAN

This section documents considerations given in development of this ESR Plan to the requirements of specific environmental laws. Specific consultations initiated or completed during development and implementation of this plan are also documented. The following executive orders and legislative acts have been reviewed as they apply to the ESR Plan.

1. **Executive Order 11593. Protection and Enhancement of Cultural Environment and National Historic Preservation Act (NHPA).** The Refuge Project Leader has verified that there are no known historic or prehistoric resources within the Big Springs burned area.
2. **Executive Order 11988. Floodplain Management.** Treatments proposed within this plan due occur within the 100-year floodplain however the treatments do not constitute structures, fills, or changes in land use as defined by this order.
3. **Executive Order 11990. Protection of Wetlands.** Treatments proposed within this plan due occur within jurisdictional wetlands however the treatments do not constitute an action that falls within the federal actions defined by this order.
4. **Executive Order 12372. Intergovernmental Review.** Coordination and consultation is ongoing with affected Tribes, Federal, State, and local agencies. A copy of the plan will be disseminated to all affected agencies.
5. **Executive Order 12892. Federal Actions to Address Environmental Justice in Minority and Low-Income Populations.** All Federal actions must address and identify, as appropriate, disproportionately high and adverse human health or low-income populations, and Indian Tribes in the United States. The BAER Team Environmental Protection Specialist has determined that the actions proposed in this plan will result in no adverse human health or environmental effects for minority or low-income populations and Indian Tribes.
6. **Endangered Species Act.** The Ecological Service's Fish & Wildlife Biologists have determined that the actions proposed in this plan will have adverse no affect on federally and State listed species.
7. **Secretarial Order 3127. Contaminants and Hazardous Waste.** There are no known contaminated sites within or within 1 mile of the burned area.
8. **Clean Water Act.** It has been determined that the action proposed in this plan would have no significant affect on water quality or quantity.
9. **Clean Air Act.** It has been determined that treatments prescribed in this ESR Plan will have no impacts to air quality that would differ significantly from routine land use practices for the area. Long-term treatments in this plan would be expected to have a beneficial impact to air quality through stabilization of ash and soils within the burned areas.

---

Richard M. Birger, Project Leader

Date

#### ENVIRONMENTAL COMPLIANCE AND CONSULTATIONS DOCUMENTATION AND DECISION

## Big Spring Fire Burned Area Emergency Rehabilitation Plan

**NEPA CHECKLIST:** If any of the following apply, the project cannot be Categorically Excluded and an Environmental Assessment (EA) is required.

- | (Yes) | (No)  |
|-------|---|
| *     | Adversely affect Public Health and Safety   |
| *     | Adversely affect historic or cultural resources, wilderness, wild and scenic rivers, aquifers, prime farmlands, wetlands, floodplains, ecologically critical areas, or Natural Landmarks.           |
| *     | Have highly controversial environmental effects.  |
| *     | Have highly uncertain environmental effects or involve unique or unknown environmental risks.   |
| *     | Establish a precedent resulting in significant environmental effects.   |
| *     | Relates to other actions with individually insignificant but cumulatively significant environmental effects.  |
| *     | Adversely affects properties listed or eligible for listing in the National Register of Historic Places.  |
| *     | Adversely affect species listed or proposed to be listed as Threatened or Endangered.   |
| *     | Threaten to violate any laws or requirements imposed for the protection of the environment such as Executive Order 1198 (Floodplains Management) or Executive Order 11990 (Protection of Wetlands). |

## NATIONAL HISTORIC PRESERVATION ACT

### Ground Disturbance:

- \* None
- ⋮ Ground disturbance did occur and an archeologist survey, required under section 110 of the NHPA has been or will be performed. A report has been prepared by the prepared by the BAER Team archeologist. Clearance documentation is attached.

### A NHPA Clearance Form:

- \* Is required because the project could affect potential site(s) eligible for the national register. The clearance form is attached. SHPO will be consulted under Section 106.
- ⋮ Is not required because the project has no potential to affect cultural resources (initial of cultural resource specialist).

## OTHER REQUIREMENTS

(Yes) (No)

\*

Does the project have potential to affect any Native American uses? If so, consultation with affiliated tribes is needed.

\*

Are any toxic chemicals, including pesticides or treated wood, proposed for use? If so, local agency integrated pest management specialists must be consulted.

The use of pesticides to control the spread of noxious weeds within the burned area will be conducted under an approved Integrated Pest Management Plan for the Desert National Wildlife Refuge Complex

I have reviewed the proposals in the Big Spring Fire Burned Area Emergency Stabilization and Rehabilitation Plan in accordance with the criteria above and have determined that the proposed actions would not involve any significant environmental effect. Therefore it is categorically excluded from further environmental (NEPA) review and documentation. BAER Team technical specialists have completed necessary coordination and consultation to insure compliance with the National Historic Preservation Act, Endangered Species Act, Clean Water Act and other Federal, State and local environmental review requirements.

---

BAER Team, Environmental Protection Specialist

Date

\_\_\_\_\_ I concur and it is my decision to approve the plan.

\_\_\_\_\_ I do not concur because.

---

Project Leader, Desert National Wildlife Refuge Complex

Date

\_\_\_\_\_ I concur and it is my decision to approve the plan.

\_\_\_\_\_ I do not concur because.

---

Manager, California Nevada Operations

Date